With the Author's
Compliments

OPERATION

FOR THE

RADICAL CURE OF LACERATED OR RUPTURED PERINEUM.

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The following is submitted in the hope it may assist in directing the attention of the medical profession not only to the frequency of the accident of which it treats, but also to the simplicity of the operation for its cure, and the uniform success attending it.

The author lays claim to little originality in the treatment of this lesion, simply modifying in some respects the operation as practiced by that illustrious pioneer in gynæcological surgery, Baker Brown.

The tabulated reports from the lying-in hospitals of Europe and America furnish no data from which we can judge of the relative frequency of this accident to the number of women delivered. Their silence on this subject can only be accounted for by a neglect to examine the parts after delivery, or from the mistaken notion that a ruptured perineum necessarily reflects discredit upon the attending accoucher. It certainly is an accident of no uncommon occurrence, both in private practice and in public institutions, and under the care of the most accomplished obstretricians; its frequency being readily accounted for

when we consider the various causes which either singly or in combination, may produce the lesion. Churchill gives thirteen causes:

1. Sacrum too perpendicular.
2. Arch of the pubes too acute.
3. Thickened state of the urethra and subjacent parts.
4. The too rapid passage of the head.
5. Exostosis in any part of the pelvic cavity.
6. Excessive breadth of the perineum.
7. Rigidity of the perineum.
8. Tissues of the perineum weakened by disease.
9. Occlusion of the lower outlet of the hymen.
10. Malposition of child's head.
11. Malpresentations.
12. Exercise of too much voluntary force by the patient.
13. Want of care when instruments are used.

Tyler Smith only alludes to the seventh division of Churchill, "rigidity of the perineum."

Gaillard Thomas gives four causes: parturition, use of forceps, manual delivery, craniotomy.

Graily Hewitt simply refers to difficult labor.

Byford gives as causes: straight sacrum, rigidity of perineum, large and unusually ossified head, too narrow arch to the pubes, unskillful use of instrument.

Baker Brown suggests as the principal causes, "the dimension of the child's head being too large absolutely and relatively for the capaciousness and expansibility of the maternal outlet; an unnatural rigidity of the perineal tissues, or extreme width of the same; unskillful use of instruments; paturition for the first time at a very early or late age."

Of the twenty-seven cases which have come under my care, twenty were of long standing, *i. e.*, varying from one to seventeen years, and their histories having been obtained principally from the patient, are not altogether reliable. Six were recent cases. In nineteen instances the accident occurred at the birth of the first child; the remaining eight were multipara. In two

of the multipara instruments were used, as also in four of the primipara. In no case could I discover any abnormal acuteness of the arch of the pubes, and in only two was the sacrum unusually straight. Two had been breech presentations, and eleven were extremely rapid labors, accompanied by violent expulsive pains; the patients stating in these cases that they felt the tissues tear, calling the attention of the attending physician to the circumstance.

From my own experience I consider the principal exciting causes to be:

1. Violent expulsive efforts by the patient, on contact of the child's head with the perineum, in most cases induced by too much manipulation.

2. Unusual width of the child's shoulders in proportion to the size of the head.

3. Extreme width of the perineum.

4. Inelasticity of the perineum occasioned by fatty degeneration of its tissues.

5. Unskillful use of the forceps.

The fourth cause occurring most frequently after thirty years of age.

The varieties of lacerated or ruptured perineum are: complete but uncomplicated, the sphincter ani remaining intact; complete and complicated, attended by rupture of sphincter ani; incomplete, when the laceration extends only a part of the distance between the fourchette and anus; perforating, this last being extremely rare.

The consequences of this accident are extremely grave, and in many cases of long standing, incapacitate the patient for any exertion in the erect posture.

The principal sequelæ are: prolapsus of the posterior wall of the vagina and anterior wall of the rectum or "vaginal rectocele;" prolapsus of the anterior wall of the vagina and the posterior wall of the bladder, or "vaginal vesicocele;" procidentia of the uterus, with all the complications attending each of these conditions.

These are not *supposed* results of the accident, but necessary

consequences, as we can readily comprehend when we examine the anatomy of the female perineum and maternal outlet, and the relative anatomy of the "genito-urinary organs." From some inexplicable cause we find the anatomy of the female perineum neglected in most works; the male perineum occupying the whole attention.

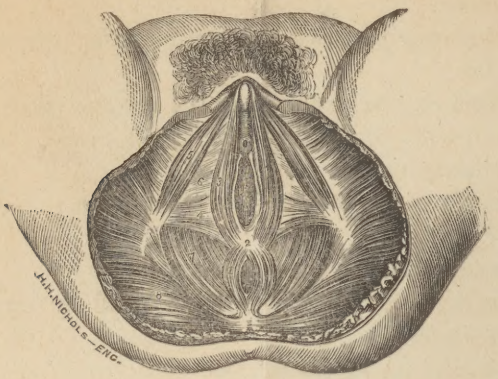

Fig. 1.

1. Sphincter ani. 2. Tendinous point of Perineum. 3. Sphincter vagina.
4. Transversus perinœi. 5. Erector clitoridis. 6. Aponeurosis.
7. Levator ani. 8. Gleuteus maximus.

By reference to fig. 1 we shall find that the posterior fibres of the sphincter vagina and the anterior fibres of the sphincter ani, are inserted into the tendinous structure and fascia of the perineum: when a complete rupture occurs, the sphincter ani contracting from its posterior insertion on either side of the coccyx, draws the anterior wall of the rectum backwards; the fibres of the sphincter vagina being torn from their posterior attachment, loose all power of drawing the posterior wall of the vagina forwards and upwards; the transversalis perinei draw the lacerated edges outwards and upwards, widening the gap made antero-posteriorly, and the vagina, which normally is a closed canal, becomes a mere chasm, and the floor of the pelvis is lost.

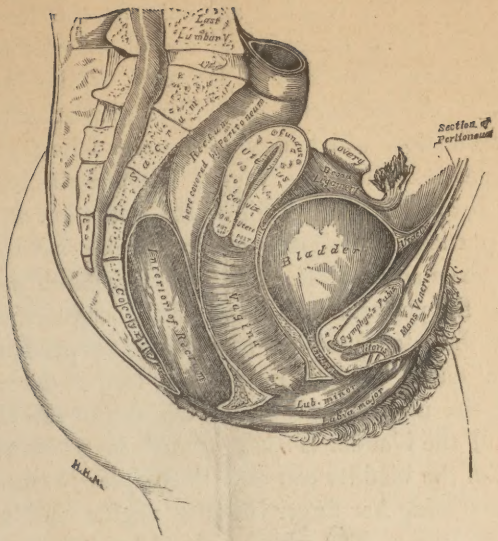
Section of Peritoneum
Bladder
Symphysis Pubis
Mons Veneris
Ovary
H.H.M.

Fig. 2.

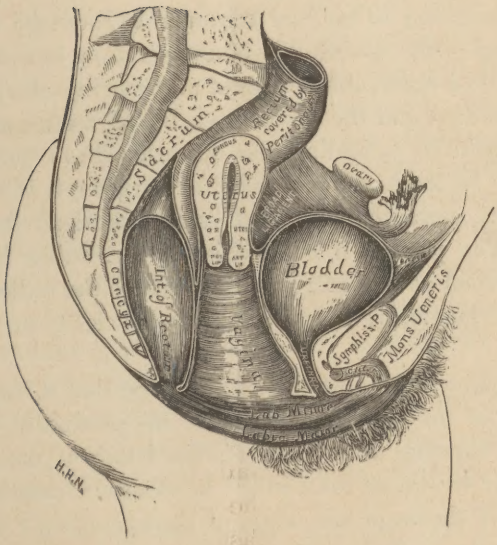
Bladder
Symphysis P
Mons Veneris
Ovary
H.H.M.

Fig. 3.

Fig. 2 shows the relative anatomy of the female genito-urinary organs in the normal condition of the perineum. Fig. 3 shows the change produced in the plane of the inferior strait by the loss of the perineum, and will readily explain the causes of the complications which attend all cases of long standing.

The posterior wall of the vagina becomes straightened, and the tissues being relaxed, permit of the formation of a pouch at the lower portion, immediately above the internal sphincter, in which the fæces accumulate, and vaginal rectocele soon follows, drawing on the posterior cul-de-sac of the vagina, and changing the axis of the uterus, which now hangs perpendicularly over the external outlet. All support being lost, it descends, drawing with it the anterior wall of the vagina and the bladder. A cul-de-sac of the bladder is soon formed, in which the urine is retained, and the bladder can only be completely emptied by the patient introducing her finger into the vagina and temporarily replacing the uterus. In addition to all her physical sufferings, a woman in such a condition is totally unfitted for the marital relation.

It is unnecessary to use any argument to convince an unprejudiced mind of the advisability of an operation, however severe, which affords a reasonable prospect of restoring the parts to a normal condition and the woman to a life of usefulness.

The difficulties attending the operation have been greatly overrated. In the hands of a skillful surgeon, it is one of the simplest and certainly most successful operations in obstetric surgery. The profession is indebted to Mr. Baker Brown for the best method of operating yet devised for the radical cure of ruptured perineum, as demonstrated by his eighty-one reported cases.

As this paper is submitted with the hope that it may be useful to some of the younger members of the profession, I may be excused for entering more fully into the details of the operation and the after treatment than would be otherwise necessary.

In some of the important stages of the operation, I follow the plan laid down by Baker Brown, differing from him, however, in my treatment of the sphincter-ani and also in some points of

the after treatment. It may be as well to point out the difference here: Baker Brown divides the sphincter-ani on either side of its cocygeal attachments, and considers it a *sine qua non* to success; I never divide it unless it has been torn through anteriorly, believing that it increases the risk of the operation by exposing so much the more surface to the process of inflammation and suppuration, and at the same time the irritation set up necessarily interferes with the chances of union by first intention in the wound immediately in front. It is, however, absolutely necessary that the sphincter remain quiescent during the process of union, and until the new tissue has become thoroughly organized. To secure this, I adopt the plan first suggested by Prof. Van Buren, of New York, *i. e.*, "paralyze the sphincter." This is done perfectly, by introducing the thumbs into the anus, seizing the nates on either side, and making gradual traction until the thumbs touch the tuber ischii. The paralysis following this remains for two or three weeks, but is never followed by permanent loss of power, which is sometimes the result of division.

Instead of the bougie, I have had made some light silver tubes, the size of an ordinary catheter, perforated at intervals of one-fourth of an inch, and closed at each end with a round cap. The advantages I claim for these over the bougie, are first, a uniform support on either side not yielding at the parts between the sutures, as is the case with the bougie; secondly, they are more cleanly; hence less irritating.

In place of waxed thread I use silver wire. I need say nothing as to its superiority. The mode of fastening it will be explained when I detail the steps of the operation.

In the after treatment, instead of keeping the bowels constipated, as recommended by Baker Brown, I keep them in a soft condition, securing a passage every day. The discharges are painless, no resistance being offered by the sphincter. The vagina should be washed out twice a day with the following:

℞. Aqua Pura ℥aj ss.
Glycerine, ℥ss.
Acid Carbolic, gr. viij.

The urine must be drawn every six hours. For this purpose I educate my nurses, and never consent to operate without one of them being in attendance from the commencement until the patient is perfectly recovered, as the least indiscretion or the clumsy manipulation of an ignorant person would jeopardize the success of the case, and thus injure both patient and surgeon. In about twelve to eighteen hours after the operation, the parts may become œdematous. This is to be treated by making several punctures with the lancet, which will liberate the serum and relieve the tension.

Operation.—The patient, being fully ætherized, should be laid upon a firm table of convenient height for the operator when sitting; the buttocks brought to the edge; the thighs flexed upon the abdomen; the knees turned out, and held in position by assistants. Remove all hair from the parts, and with a small, sharp-pointed scalpel, mark the outline of the part you intend to remove, taking care to allow for the contraction which will necessarily follow cicatrization. The width of the part to be removed must not be less than three-fourths of an inch antero-posteriorly, and extend the same width upwards on either side to the point where the perineum started before the accident.

It is very important that the dissection be carefully made, and hence it is better to remove the membrane in one piece. For this purpose, the knife is better than scissors.

The next step is to insert the sutures. I use a strong curved needle, about three inches long, with a cutting point only. This is armed with silk doubled, so that, when drawn through, a loop remains at the point of entry. Insert the needle an inch, or one and one-fourth inches, from the external edge of the wound, and press it directly backwards for about half an inch before you turn the point towards the inner edge of the wound, at which part it is to be brought out; enter it again on the opposite side on the inner edge, and make it traverse the same direction to the point of final exit. Select a piece of silver wire of medium size, about ten inches long, bend the end over and hook it into the loop of silk, draw the silk out and the wires will follow without kinking. Three to four sutures are

generally necessary. The first must be entered at the bottom of the wound so as to control the parts around the anus. The wires being in position, are to be passed through the tubes and secured on the patient's left side first, by means of perforated duck shot, the shot being strongly compressed on the wire, the terminal end of which should be bent sharply over, as seen in the illustration fig. 4. Bleeding having ceased, the cut surfaces are to be carefully cleansed and the parts coaptated by drawing first on the central wire, an assistant gently pressing the soft parts together. The right tension being obtained, slip the shot down to the tube and securely clamp it. Proceed next with the lowest suture, and finish at the top—the superficial edges are to be brought together with the interrupted suture.

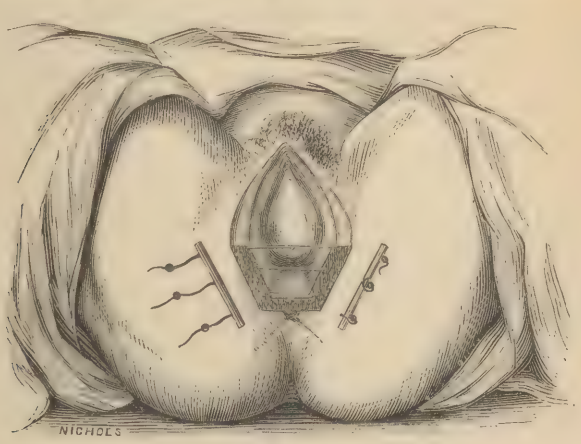

Fig. 4.

The patient, being removed to her bed, should be placed on her side, her knees tied together and cold-water dressings applied for the first twenty-four hours.

The deep sutures should be removed on the third day; the superficial ones on the ninth.

For the first month great care must be taken to prevent undue traction upon the newly cicatricized tissue. Fig. 4 shows the outline of incision, with the sutures in position ready for the parts to be brought into coaptation.

Case 1.

Complete Rupture, with Prolapsus Uteri: Cure.

Mrs. M— C—, aged twenty-seven, admitted to Columbia Hospital June 28, 1866. She gave birth to her first child twenty months ago, which she still continues to nurse, the child being a fine healthy boy. Patient complained of constant pain in the sacral region with profuse leucorrhœa and prolapsus of the the uterus. To keep the womb within the vaginal canal, she was compelled to wear a T bandage and pad. Her general condition was very ænemic. Vaginal examination, the patient being placed on her side, disclosed a complete rupture of the perineum, which originally must have measured at least one and three-fourth inches. Os-uteri patulous, with granular erosion of both lips, which were much hypertrophied. There was a general catarrhal condition of the mucous membrane of the vagina, the pelvis was very capacious. Her labor had lasted but half an hour.

General treatment: The child was weaned immediately, and the mother placed upon extra diet, with six ounces of wine daily, and iron administered in full doses; absolute rest in the recumbent position having been enjoined.

Locally: Chromic acid was applied to the erosions, which were the result of friction against the pad, and a pledget of raw cotton, soaked with the following preparation, passed up to the posterior cul-de-sac, and allowed to remain twenty-four hours, when it was removed and a fresh one introduced:

℞. Glycerine, ℥iv.
Tannin, ʒij.

This treatment was continued for three weeks, the patient improving rapidly in her general health. The rest and astringent application combined had prevented any descent of the uterus; the mucous membrane had gained considerable tone, and the patient was considered in a sufficiently good condition to bear the operation for a radical cure.

July 22.—Patient, being fully ætherized, was placed in the position advised, and the operation proceeded with as directed.

Twelve P. M.—Ten hours after operation, patient suffering considerable pain, very restless, pulse 120, and irritable. Ordered R. Aq. ext. opii. gr. ij, to be administered immediately; ice-water dressing to the vulva to be changed every few minutes; the pill to be repeated in four hours, unless the patient was quiet.

Eight A. M.—Slept after taking the second pill; much less pain; pulse 100, and softer; one grain of the opium to be taken every four hours until the patient is free from pain.

Ten P. M.—Pulse 88, and soft; but little pain since noon; complains of thirst; suspended the opium, and gave the "effervescing mixture."

From this time onward everything progressed well. The deep sutures were removed on the morning of the fourth day, and the superficial on the ninth, the result being complete union in every part by first intention.

Patient was retained three weeks longer in the hospital to continue the general treatment, being still somewhat anæmic. Discharged cured, August 21.

On July 24, 1867, eleven months and three days after leaving the hospital, she was delivered of a well-developed boy at full term. The labor was rapid, and the perenium lacerated for about a quarter of an inch, but on the side of the cicatrix. This was allowed to take care of itself, as there remained intact fully one and a quarter inches. She made a good recovery, and has since given birth to another child without any further laceration.

Case 2.

Complete Rupture, complicated with Coccyodynia.

Mrs. S—, aged forty-one, married in 1854, delivered of her first child March, 1866, nine weeks previous to the time I saw her; patient complained of severe pain when sitting, or upon the passage of fæces or flatus from the bowels. The history, as given by her medical attendant, was as follows: The labor had been protracted over three days, the patient suffering severely most of the time. A consultation was had on the morning of

the fourth day, when the forceps were applied and the woman delivered of a living child. The rupture was noticed at the time, and every attempt was made to bring about a union of the parts by keeping the limbs tied together and applying local stimulants, but without success.

Upon digital examination, I found a fracture or dislocation of the coccyx at about half an inch from the tip—most probably a fracture—which accounted for the severe pain. The fractured parts were disturbed on every contraction of the levator or sphincter-ani muscles. There was also a complete rupture of the perineum.

It was decided to adopt the treatment recommended by Professor Simpson, of Edinburgh, for the injured coccyx, and then to proceed with the operation for the restoration of the perineum.

The double operation it was proposed to perform was fully explained to the patient, and her consent obtained, but she positively refused to take any anæsthetic.

The patient being placed on her side, a tenotomy knife was introduced at the back part of the coccyx, and its muscular and tendinous attachments liberated from both sides and from the tip, the operation occasioning but little pain.

After a few minutes rest, she was placed in the position for the major operation, which was proceeded with as usual, and lasted fifteen minutes.

The result was very gratifying. The severe pain which she had suffered from the injury to the coccyx was immediately relieved; her convalescence was rapid and without one untoward symptom. The restoration of the perineum was complete, union having taken place by the first intention.

Case 3.

Complete Rupture, involving the Sphincter Ani and Recto-Vaginal Septum: Cure.

Mrs. T—, aged 31; mother of four children. She was delivered of her last child four months since, at which time the accident occurred.

There was nothing connected with the history of this case which could satisfactorily account for the rupture. The woman was well proportioned, of fine physique, and her infant had no abnormal development of the head or shoulders. Her labor had been of an average duration, and not severe, and the same medical gentleman attended her with the last as with the three previous children. No instruments had been used.

Her convalescence had been slow; she was unable to sit up before the seventh week, and it was four months after the birth of her child before she could endure the fatigue of journeying from her home in Pennsylvania to Washington.

I saw her the day after her arrival, and found, upon examination, a complete rupture of the perineum and sphincter-ani muscle; the laceration extending about one and three-fourths of an inch up the recto-vaginal septum.

She had had but little trouble in controlling the bowels, being naturally of a very costive habit, but flatus passed involuntarily. When the bowels were moved she suffered great pain, occasioned by the ulcerated condition of the edges of the upper part of the laceration.

There had been no prolapsus of the uterus, and the mucous membrane of the vagina was in a healthy condition, excepting the part at the edges and apex of the laceration.

It was necessary to perform two distinct operations: first, to restore the integrity of the sphincter ani and recto-vaginal septum; and secondly, to restore the perineum.

July 3.—Patient being etherized, was placed upon her back, with limbs well flexed upon abdomen. The thickened edges of the laceration on both sides were removed by the scissors, the incisions extending half an inch beyond the apex of the rupture, to secure healthy tissue. The sphincter was divided laterally. The edges were carefully approximated by the interrupted wire suture. The wires were removed on the ninth day, and the parts found perfectly united.

August 11.—The operation for restoration of the perineum was performed in the usual manner. The sphincter not having recovered from the previous division was not interfered with.

On the second day after the operation there was so much œdema of the parts engaged within the sutures that I was fearful it would be necessary to remove them ; but free puncturing and the application of ice proved sufficient. The deep wires were not removed until the fifth day, when it was found that suppuration had formed in the track of the middle suture, the pus flowing freely upon its withdrawal. This accident was the result of retaining the deep sutures in situ two days longer than was necessary, but it in no way interfered with the success of the operation, union being perfect in every part. The superficial sutures were removed on the ninth day.

Patient left for her home on September 18th, cured.

Case 4.

Complete Rupture, eight years' standing : Cured.

Mrs. H—, admitted into Columbia Hospital September 17, 1866 ; seamstress by occupation ; mother of two children ; complains of severe pain in the sacro-lumbar region, profuse leucorrhœa and smarting after urinating.

Examination revealed complete rupture of the perineum, with eversion of the lower portion of the vagina, which was intensely inflamed. The inflammation was rapidly reduced by the use of glycerine and aqueous extract of opium.

The operation for restoration of the perineum was performed September 27, and the patient left the institution, October 24, cured.

Case 5.

Incomplete Rupture.

Mrs. S—, wife of a physician, delivered of her first child after a protracted labor, the head having rested upon the perineum for six hours. The rupture was discovered on the birth of the child, and I saw her in company with her husband a few hours afterwards.

The laceration extended to within one-fourth of an inch of the anus. The parts being carefully sponged with a weak solution of carbolic acid in water, the edges were approximated and retained in position by the quilled suture.

The after treatment differed but little from that pursued in cases of long standing.

The patient made a good recovery, the operation being entirely successful.

Case 6.

Complete Rupture, Recto-Vaginal Fistula and Prolapsus Uteri.

Mrs. M—, widow, aged thirty-seven; mother of five children, youngest child being three years of age.

Complains of constant pain in the back; profuse and offensive discharge from the vagina; loss of appetite and extreme debility.

Examination revealed a complete rupture of the perineum, and a fistulous opening into the rectum two-thirds of an inch in length immediately below the posterior cul-de-sac. The uterus measured four and half inches, and bled freely on the withdrawal of the sound, although great care had been used in its introduction; cervix hypertrophied and os patulous, but no ulceration or abrasion.

Treatment: The following ointment was introduced into the cavity of the uterus every third day with the view of reducing the endo-metritis:

℞. Ungt. simplex, ʒiv.
Argent nit. cryst., gr. x.
Aq. ext. opii, ℈j.

A pledget of raw cotton soaked in glycerine, containing four grains carbolic acid to the ounce, was passed up to the cul-de-sac morning and evening—the glycerine to reduce the hypertrophy of the cervix and the acid as an antiseptic.

Tonics were freely administered, and the patient kept in the recumbent position.

On the seventh week, from the commencement of treatment, "Sims'" operation was performed for the closure of the fistula with perfect success.

Three weeks afterwards, the perineum was restored by the usual operation. The patient made a good recovery and left for her home, in West Virginia, January 22, 1867, cured.

I have since learned that this lady was married the following

June, and in due time gave birth to a child, but did not learn with what result as respects the perineum.

Case 7.

Complete Rupture of five years' standing: Cured.

Mrs. C—, admitted into Columbia Hospital January 12th, 1867. Mother of one child. Patient complains of prolapsus of the uterus whenever she stands or walks; constant pain in the lumbar region; offensive leucorrhœal discharge, so abundant as to compel her to wear a napkin. Menstruation occurring fortnightly.

Upon examination, there was found a complete rupture of the perineum; the cervix uteri protruding between the labia, os patulous, cervix hypertrophied. Patient was placed under constitutional and local treatment, with the view of restoring the uterus and its functions to a healthy condition, before attempting the restoration of the perineum.

Her recovery was very slow, it being nearly three months before she was in a condition to endure surgical interference.

April 8.—Operation for radical cure performed in the presence of the clinical class. There was considerable difficulty in arresting the hemorrhage, owing to the unusual size of the arterial branches, which were wounded in the dissection. A ligature being inadmissible, we were compelled to rely on torsion which in this instance failed to accomplish the object.

The deep sutures were removed on the third day, the superficial on the eleventh. Union perfect.

Case 8.

Complete Rupture: Cure.

Mrs. B—, admitted into Columbia Hospital March 19, 1867. Pregnant with her first child. Upon making an examination, in order to ascertain the probable time of labor, it was found that the vaginal orifice was extremely small, as also the lower part of the vaginal canal. The perineum was thick and inelastic, feeling like cartilage. This condition of the parts made it

probable that during delivery there would be a rupture of the perineum and lower part of recto-vaginal septum.

The labor was very rapid, and every effort was made to prevent the anticipated accident, but, so far as the perineum was concerned, without success.

A severe attack of metro-peritonitis followed delivery, and it was some weeks before an attempt could be made to restore the integrity of the lacerated parts.

May 23.—The usual operation was performed in the presence of the class. The patient's recovery was rapid; union perfect by first intention. She left for her home in North Carolina June 25th.

The large amount of white inelastic tissue, and the few muscular fibres entering into the formation of this woman's perineum, would make it liable to rupture at any succeeding labor.

Case 9.

Complete Rupture: Cure.

Mrs. S—, mother of two children, the youngest twenty-eight months old. From the history of this case, which was given entirely by the patient, the rupture must have occurred at her first labor, which was very protracted. She suffered the usual discomforts attending the lesion, but her general health was good, although she had taken but little exercise, as it always increased the uneasiness about the pelvis.

May 26, 1867.—Patient being placed in position, chloroform was administered, and the operation commenced. Doctor F. A. Ashford, my usual assistant, administering the anæsthetic. When the operation was about half completed, there was a sudden cessation of respiration and irregularity of the heart's action. The tongue was instantly drawn forward, and artificial respiration commenced, but at the end of five minutes, there was no apparent improvement in the patient's condition. The artificial respiration was continued for nearly thirty minutes before we were rewarded by a full-drawn inspiration by the patient. Our feelings may be better imagined than described. It is hardly necessary to state that the operation was completed without the

further use of an anæsthetic. The patient was quite feeble for some days, but her recovery was perfect. The same success attending the operation in this, as in the previous cases. I have since delivered this lady of a well-developed child, weighing eleven pounds, the perineum remaining intact. This is the third case in my practice where I have nearly lost my patient by the use of chloroform. I use it no longer, preferring the slow, but safer, anæsthetic, sulphuric æther.

Case 10.

Complete Rupture.

Mrs. B—, aged nineteen, mother of one child four months old.

The rupture in this case had been produced by the unskillful or careless use of forceps, the operator being a German midwife, who applied them without the consent of the patient or her husband.

The limbs had been kept together, and warm stimulating applications made to the vulvar; but the urine and discharges coming in contact with the lacerated edges prevented any union.

June 7, 1867.—Operation performed at noon. In the evening the patient complained of great pain, and was very restless; ordered a full dose of opium, to be repeated in six hours. The following morning the parts were so much swollen that I found it necessary to puncture them freely and to remove the middle suture, and loosen the upper one; warm applications were kept constantly applied.

This treatment relieved the pain, and no other unpleasant symptom presented itself.

The remaining two sutures were not removed until the fourth day, when, contrary to my expectations, there was perfect union.

This patient was very fat about the genitals, and the error which caused the difficulty in the case was drawing too tightly on the wires, not making sufficient allowance for the swelling which would necessarily follow where there was so much cellular tissue included.

[CONCLUSION IN OUR NEXT.]

Case 11.

Complete rupture, complicated with Polypus of the Uterus and Hæmorrhoids.

Mrs. M—, æt forty-three, mother of nine children; married at fifteen years of age; first child born before she had reached her sixteenth year. Patient emaciated and almost exsanguinated. She has hæmorrhage from uterus every few days, and from the hæmorrhoids whenever the bowels are moved.

A careful examination was made, and, in addition to a complete rupture of the perineum, there was discovered a group of ulcerated hæmorrhoids. The uterus was much enlarged, and the introduction of the sound followed by a copious discharge of blood; a sponge tent was introduced to determine the diagnosis, so far as the uterus was concerned, and upon its withdrawal the next day a large polypus was discovered. The treatment was directed first to the removal of the polypus, and the arrest of the hæmorrhage, which was done by ligation.

After recovery from this, the hæmorrhoids were destroyed by the treatment adopted by Prof. Markoe, of New York, *i. e.* the application of fuming nitric acid to their entire surface, every three or four days, until removed. The application is almost painless. It was deemed advisable to defer the operation, for the restoration of the perineum, until the patient's general health might be restored.

June 28.—Operation performed without the use of any anæsthetic, no unpleasant symptoms occurring during the after treatment, and the patient left for the country July 19th, cured.

Case 12.

Rupture complete, nine years duration: Cure.

Mrs. F—, æt. 31. In her first and only confinement, which occurred nine years since, the perineum was torn completely

through, the child presenting breech first. For the last seven years she has worn a ball pessary to retain the uterus in situ.

The pessary was removed, rest in the recumbent position enjoined, and a strong solution of tannin in glycerine applied to the mucous membrane of the vagina daily. This treatment was continued for some weeks with success.

July 11, 1867.—Performed my usual operation which was followed by some irritative fever, controlled readily, however, by opium.

The deep sutures were removed on the third, the superficial on the eleventh day. The union was perfect.

I met this lady at the house of a friend of hers eleven months after, when she informed me she had suffered no inconvenience since the operation, and had enjoyed better health than for several years previous.

Case 13.

Complete rupture, and fibrous tumor of left labia.

Mrs. A—, æt. 38, came under my care September 8, 1867, Has had three children, the laceration having occurred with the first child. The tumor in the labia was first noticed about three years since, and during the last eighteen months has increased rapidly.

She had been told that rupture of the perineum was incurable, and I was therefore consulted only in reference to the tumor, which had grown to be a source of great discomfort, being very large and blocking up the entrance to the vagina.

The tumor was removed with some difficulty, its attachments being strong and deep, and the operation attended with considerable venous hæmorrhage. After its removal it weighed nine and half ounces.

Upon recovery, the patient, by my earnest recommendation, submitted to the operation for the restoration of the perineum, which was performed December 4, and attended with the usual success.

Case 14.

Complete Rupture with prolapsus of the Uterus of seven years duration.

Mrs. P—, æt. 40; admitted into Columbia Hospital on the recommendation of Doctor Van Buren, January 20, 1868. Mother of one child seven years of age. Since the birth of this child she has been suffering from prolapsus of the uterus, and for the last five years the uterus and vagina have been external to the body, supported by a handkerchief passed round the loins. There was complete rupture of the perineum. The exposed mucous membrane had lost its characteristic appearance and was extensively ulcerated. The accompanying vagino-vesicocele had not been reduced for some years, and the bladder had become so irritable from the decomposition of retained urine that only a few drops could be tolerated above the amount accumulated in the cul-de-sac. When voided it necessarily passed over the ulcerated surface before mentioned, and caused extreme pain.

It is difficult to conceive of a condition more deplorable than that from which this poor woman was suffering.

The enormous capacity of the vagina would render any attempt to retain the uterus in situ by a pessary unsuccessful, and, after consultation, it was decided to attempt a radical cure by a modification of "Sims" operation. This was performed in the presence of Doctors N. Young, J. Eliot, T. Morgan, and the clinical class. An ellipse six inches in length and four inches in width was removed from the anterior portion of the vagina, the whole of the thickened tissue, included within the limits, being removed, interrupted sutures of silver wire were introduced one quarter of an inch apart, and the uterus was returned within the pelvic cavity before the parts were brought in apposition.

The patient was placed upon her back and the pelvis elevated,

a pledget of raw cotton, soaked in glycerine and carbolic acid, introduced daily, and the urine drawn every six hours. No unpleasant symptom followed. The wires were removed on the fourteenth day, when it was found that every part had united by the first intention.

On March 2d the operation for the restoration of the perineum was performed in the presence of the same gentlemen, and was attended with complete success.

For about one year this woman suffered no inconvenience, but after that time the uterus began to descend, and made its appearance externally eighteen months after the first operation. She was admitted into the Howard Hospital, and Dr. Reyburn removed a further section from the vagina, which appears to have perfected the cure.

I am satisfied that many of these operations fail from the operator being too conservative, not removing a sufficient amount of tissue. The perineum remained intact.

Case 15.

Complete Rupture, two months standing: Cure.

M. S.—, admitted into Columbia Hospital January 24, 1868, upon the recommendation of Dr. N. Young; was confined of her first child two months since, her labor having been very protracted and finally terminated with forceps. An attempt had been made to restore the perineum immediately after her labor, by the interrupted suture, but without success.

The usual operation for complete restoration was performed in presence of the clinical class on January 25th. She was discharged, cured, February 27th.

This woman was confined with her second child, eleven months after leaving the Hospital, without any injury to the perineum.

Case 16.

Complete Rupture, twenty-one years duration: Cure.

Mrs. N.—, æt 47; mother of eight children. Although the injury in this case occurred at the birth of her first child, and the inconvenience attending it had increased with each succeeding year, yet nothing beyond mere palliative measures had been suggested for her relief. The uterus had been retained in situ by the daily introduction of a sponge saturated with a strong decoction of white oak bark. Her urine was voided by catheter only, which she had learned to introduce herself.

When placed under my charge, March 8, 1868, she was emaciated to an extreme degree and anæmic, the irritability of her nervous system was so great that it was only after repeated attempts I succeeded in keeping her quiet long enough to make a sufficient examination to satisfy myself as to her condition.

The rupture of the perineum was complete, but uncomplicated with either prolapsus of the uterus or vaginal walls; this usual accompaniment, in cases of long standing, having been prevented by the daily use of the medicated sponge pessary.

It required some weeks of preparation before this patient was in a condition to permit of operative interference, but, by the free administration of cod liver oil, strychnine, iron and whisky, I succeeded in bringing her up to a point that warranted an attempt at radical cure.

June 8.—Assisted by Drs. Ashford and Eliot, I performed the usual operation; the deep sutures were removed on the third, and the superficial on the twelfth day, every portion having united by first intention.

The first three days after the operation this lady suffered from a continued series of hysterical paroxysms, large doses of the bromide of potash, (one drachm every two hours,) failed to control her, and they apparently yielded only to exhaustion.

The generally morbid nervous condition of this patient, ac-

companied by a habit of constant catheterization, and an indisposition for the slightest exertion, which continued for some time after the operation, made it one of the most difficult cases I have had to manage.

August 13.—She left for the springs, not having been out of her house before for five years.

Case 17.

Incomplete Rupture, two years duration: Cure.

N. S.—, æt 27; has had three children; the two first born without any unusual difficulty, the last a protracted labor, the breech presenting. Her convalescence was slow.

The laceration extended to within one third of an inch of the sphincter, and the vaginal walls had commenced to yield to the pressure of the uterus. An operation was recommended at once, not on account of any immediate inconvenience, but to prevent the complications which would present in a short time, if the perineal support should not be restored.

The operation was performed on May 8th, no anæsthetic being used, the deep and superficial sutures were removed at the usual time, and similar success attended this as had marked former cases.

Case 18.

Complete Rupture, immediate operation: Cure.

Mrs. F.—, æt 30. I was sent for to deliver this lady May 11th, after she had been in labor for sixty-five hours, but the child was born before I reached the house. The head was of unusual size, and its passage doubtless the cause of the rupture.

The perineum was torn through to the anus, involving a portion of the sphincter. The parts were brought together by the

quill and interrupted suture, united kindly; the wires were removed at the usual time, and her convalescence was as rapid as it could have been had no accident occurred.

Case 19.

Complete Rupture of the Perineum, and prolapsus of the Uterus and Vagina.

P. N.—, æt 40; admitted into Columbia Hospital June 2, 1868. This woman stated that she had been for several years in the condition in which she presented herself at the hospital, unable to work for her support, and dependant upon the charities of the public.

The entire vaginal walls were exterior to the body, and covered with scales of dried epithelium, abrasions, and ulcerations, there being no spot of healthy mucous membrane. The os uteri was patulous, the index finger passing readily into the uterine cavity, and the whole organ very much hypertrophied.

Before any operation for a radical cure could be attempted, it was necessary to restore the vaginal mucous membrane to a healthy condition.

The procidentia was reduced with some difficulty, and the vagina kept thoroughly anointed by pledgets of raw cotton soaked in glycerine and watery extract of opium. This application not only served to restore the mucous membrane, but retained the uterus in situ.

The treatment, conjoined with a general tonic course, was continued for some weeks before the constitution and local condition of the patient was sufficiently improved to permit of surgical interference.

July 3.—Patient being fully ætherized by Dr. Ashford, was placed in the ordinary position for lithotomy, and Emmett's modification of "Sims'" operation for the radical cure of prolapsus uteri performed, the section being taken from the anterior wall of the vagina. The parts united perfectly and were considered sufficiently contracted to retain the uterus in position when assisted by a restored perineum.

On the seventeenth day of the same month the usual perineal operation was performed, and on August 20th she left the hospital apparently cured.

Dr. Ashford saw this woman about one year after the operation. She had been working steadily most of the time since she left the hospital. The perineum was strong and perfect, but the uterus was found to be low down and resting upon the perineum.

The same mistake was made in this as in case 14, and it will be necessary to remove another section from the posterior wall of the vagina to perfect the cure.

Case 20.

Complete Rupture of the Perineum and Procidentia Uteri, eleven years standing: Cure.

Mrs. P.—, æt 50; admitted into Columbia Hospital July 11, 1868. The condition of the patient was similar to "case 14," but she had taken better care of herself. By frequent bathing and anointing the parts with fresh lard, she had succeeded in preventing the ulcerations and excoriations of the mucous membrane.

July 20.—The patient being fully ætherized, the same operation was performed as in case 14, but double the quantity of tissue removed, the calibre having been reduced more than one half.

No constitutional disturbance followed, the wires were removed on the fourteenth day, when every part was found united.

August 5.—The usual operation for restoration of the perineum was performed in the presence of my clinical class. The deep wires were removed on the third, and the superficial on the eleventh day, union being found perfect. Patient left the hospital, September 8th, cured.

There is no probability of a return of the prolapsus in this case, for the contraction of the vagina was so perfect that the uterus

could not descend, and there being fully two and one quarter inches of sound perineum, the maintenance of the vagina in its integrity was secured.

Case 21.

Complete Rupture of the Perineum, with Procidentia Uteri, twelve years' standing: Cure.

Mrs. B—, æt 60; admitted to Columbia Hospital July 27th. The general condition of this patient good; her constitution having suffered little from the local trouble, probably owing to the absence of the periodical congestions attending the catamenia, the climacteric period having been reached at her 48th year.

The uterus was much enlarged from congestion due to its malposition, not from any increase of its parenchyma. Reduction of the procidentia and rest in the recumbent position for a few days, brought the uterus down to nearly its normal dimensions.

The size of the vulvo-vaginal opening was enormous, and the restoration of a perineum, of ordinary dimensions, would have failed in retaining the uterus in situ. I therefore decided, with the consent of patient, to close the entire opening, leaving only a portion patent, the size of a goose quill, for the escape of the secretions.

August 8.—The operation was performed in the presence of Drs. Young and Eliot, Dr. Ashford assisting. The mucous membrane was removed on either side to the extent of four inches, and of the same width as in the ordinary operation for restoration. Six deep sutures were used, and nine superficial. The wires were removed at the usual time, and union found to be perfect. She left the hospital September 13th, cured.

Case 22.

Complete Rupture, Procidentia, and Vesico-vaginal fistula: Cure.

Mrs. D—, æt 38; admitted to Columbia Hospital September 4, 1868, on the recommendation of Dr. L. Mackal, Jr. She was the mother of three children, but, from her history, I could

not learn in which of her confinements the rupture occurred, but that some months elapsed after the birth of her last child before she experienced any serious inconvenience. She then complained of a continuous pain in the lumbar region, and profuse lucorrhœa. After standing for a short time, or making any extra exertion, the uterus would protrude through the vulva.

Upon making her condition known to her family physician, he recommended the use of astringent injections and adjusted a ring pessary to retain the uterus, requesting her to return to his office in a few weeks to have the pessary removed. She, however, found herself relieved by the measures adopted, and did not see him again for more than one year. There had been no return of the prolapsus, but she then complained that her urine constantly dribbled from her, and of an offensive sanguineo-purulent discharge from the vagina.

The pessary was removed, and ulceration found to have taken place through the walls of the vagina and bladder, at the lower portion of the neck, producing a vesico-vaginal fistula.

At the time of her admission to the hospital, she was much emaciated and anæmic, and it was several weeks before any attempt was made to restore the integrity of the parts.

The first and second operation for the closure of the fistula were unsuccessful, owing to the unhealthy condition of the tissues, there being no attempt at union. On the third trial I determined to remove every portion of suspected tissue around the fistula, and by so doing, increased the opening from one quarter of an inch in its long diameter to one and one-eighth of an inch. The wires were removed on the tenth day and union found perfect. After some weeks of rest, she had gained strength and flesh, and I restored the perineum by the usual operation. The deep sutures were removed on third, the superficial on the twelfth day.

November, 28, she left the hospital perfectly cured. I have frequently heard from this patient since she left. She is enjoying good health, and has suffered no inconvenience from her former troubles.

Case 23.

Complete Rupture, Vaginal Rectocele, eleven years' duration: Cure.

Mrs. R—, æt 32; mother of one child, was placed under my care October 4, 1868. Her labor was tedious and terminated by the forceps. The perineum was entirely gone, and she had a large rectocele; had worn a ball pessary for some years.

A section was removed from the posterior wall of the vagina which relieved the rectocele, and after a full recovery from this operation, the cure was completed by restoring the perineum in the usual mode.

She left for her home December 20th, cured.

Case 24.

Complete Rupture, four years' standing: Cured.

Mrs. B—, æt 29; admitted to Columbia Hospital August 8, 1868. Mother of three children; the accident occurred at the birth of her last child, her labor having been very rapid, and the child's head and shoulders unusually large. She had applied for admission in March, but was at that time so extremely anæmic that no operation would have succeeded. I recommended her to wait a few months, and placed her upon tonic and stimulating course of treatment. She improved rapidly, and at the time of her admission was in a good condition.

August 10.—The ordinary operation was performed in the presence of the class; Dr. Ashford, my first assistant, administering the anasthetic. Everything progressed favorably; the sutures were removed at the usual time, and union found perfect.

Patient left the hospital September 11, cured.

Case 25.

Complete Rupture, Hæmorrhoids, and Prolapsus Uteri: Cure.

Mrs. S—, æt 35; mother of six children, came under my care September 2, 1868; has been suffering for several years

from hæmorrhoids, but during the last six months they have increased so much in size, and are attended with so much pain as to disable her from engaging in her household duties.

It was for this difficulty that she consulted me. Upon examination I discovered the ruptured perineum, and detected a horse shoe pessary, which she said she had worn since 1862. I recommended first the removal of the hæmorrhoids, and then the restoration of the perineum; promising her she would be able to dispense with the pessary.

The hæmorrhoids were removed with chain ecraseur, with the loss of not more than one ounce of blood. Three weeks afterwards the perineum was restored by the usual operation. But little constitutional disturbance followed either operation; patient made a rapid recovery, and was entirely relieved from pain or inconvenience.

I have seen her frequently since, and the cure appears to be permanent; the uterus is in its normal position, and is disposed to stay there.

Case 26.

Complete Rupture, five years' standing, Ulcers of Rectum.

Mrs. D—, æt 37; admitted to Columbia Hospital October 17, 1869. The general condition of the patient was not good, but she was urgent for the operation, as she had left her family for that purpose and was anxious to return.

October 19.—Patient, being fully ætherized, the ulcers in the rectum were freely divided; the sphincter being included in the division—and the usual operation for restoration performed in the presence of the Clinical class. There was much more hæmorrhage than usual, and some time elapsed before the parts could be brought together. Three deep sutures and six superficial were used.

October 21—10 A. M.—Patient has had a severe rigor, lasting over half an hour, followed by heat of skin, thirst, and considerable pain in the head; pulse 120. There was no unusual inflamation or pain about the parts to account for these unpleasant

symptoms. A full dose of opium was administered, and ordered to be repeated in six hours. At 9 P. M., skin moist, pulse 120 and small, no marked restlessness; ordered one ounce of brandy with each dose of the opium.

Twenty-second—10 A. M.—Patient bright and cheerful; less fever, pulse 118, soft; removed the deep sutures; parts very healthy.

8 P. M.—Has had another chill more severe than the first, pulse 130; great restlessness; some cough, but not very troublesome; gave quinia, opium and brandy in full doses.

23d, 11 A. M.—Skin moist, tongue slightly furred, pulse 117. A careful examination was made to ascertain if any pus had formed in the track of the deep sutures, but none was found.

She continued in much the same condition until the 28th, when the superficial sutures were removed, and contrary to all reasonable expectations there was perfect union.

From this time onward the cough was more troublesome, she had occasionally rigors, temperature increased, pulse never below 120, great prostration, and all the well marked symptoms of surgical fever. She died December 21st, two months from the time of operation. No post-mortem was allowed.

The error I committed in this case was in operating upon a patient decidedly below par. If I had submitted her to a judicious course of medical treatment for some weeks at least before operating, I feel confident she would have been spared to her family, and I saved the mortification of reporting a case which, in its general results, was a decided failure.

Case 27.

Complete Rupture, Prolapsus of the Rectum, three years' standing: Cure.

Mrs. S—, æt 37; mother of four children. The rupture occurred at the birth of her last child, and was complete, extending through the sphincter. Whenever the bowels were moved or the patient stood for a few minutes, the rectum would become prolapsed to the size of a large orange, and it was difficult to return it.

The treatment was directed to the restoration of the perineum and sphincter ani, being satisfied that the protrusion of the bowels was a natural consequence of the loss of support.

March 21, 1869.—I restored the perineum in my usual mode, but departed from my general practice in the after treatment by keeping the bowels closed for sixteen days, in the meantime throwing into the rectum, twice daily, two ounces of a strong decoction of white oak bark.

April 8.—The bowels were moved by one ounce of castor oil; there was no extrusion of the rectum, and the perineum was perfectly sound.

I have seen this lady on two occasions since, and she assures me she has had no return of the difficulty.